AMENDMENTS TO THE CLAIMS:

Claims 1–4, 6-16, and 18-69 were pending at the time of the Office Action with claims 19-69 withdrawn. Claims 1 and 4 are hereby amended. Claims 1–4, 6-16, and 18-69 remain pending with claims 19-69 withdrawn.

In the Claims:

1. (Currently Amended) A method for performing human factors process failure modes and effects analysis for a process, the method comprising:

receiving, at a data processing device, inputs representing at least one task involved in the process, the task including at least one human activity and described using at least one verb;

extracting, with the data processing device, the at least one verb from the received inputs representing the at least one task involved in the process;

searching, with the data processing device, a database for at least ~~one~~ two potential human ~~error~~ errors resulting from the human activity, the at least ~~one~~ two potential human ~~error~~ errors resulting from the human activity being related to the at least one verb extracted by the data processing device;

transmitting, from the data processing device, an output representing the at least ~~one~~ two potential human ~~error~~ errors;

receiving, at the data processing device, an input representing which of the at least two potential human errors were selected for evaluation;

transmitting, from the data processing device, an output representing at least one of the human errors selected for evaluation;

receiving, at the data processing device, an input representing a likelihood of occurrence of the human error;

receiving, at the data processing device, an input representing a likelihood of correction of the human error;

receiving, at the data processing device, an input representing a potential severity of an effect of the human error;

calculating, with the data processing device, a risk of potential harm from the received inputs representing the likelihood of occurrence of the human error, the likelihood of correction of the human error, and the potential severity of the effect resulting from the human error;

comparing, at the data processing device, the calculated risk of potential harm with a risk threshold;

transmitting, from the data processing device, an output representing errors that exceed the risk threshold;

receiving, at the data processing unit, an input representing additional analysis of errors that exceed the risk threshold; and

transmitting, from the data processing device, an output representing a human factors process failure modes and effects analysis report.

2. (Previously Presented) The method of Claim 1, wherein the inputs representing the at least one task include identifying a human-system interface.

3. (Previously Presented) The method of Claim 1, wherein the database is a potential human error database associating potential human errors with verbs useable describing the human activity involved in the task.

4. (Currently Amended) The method of Claim 1, further comprising displaying the at least ~~one~~ two potential human ~~error~~ errors in an error list.

5. (Canceled)

6. (Original) The method of Claim 1, wherein calculating the risk of potential harm further comprises quantifying the likelihood of occurrence of the error, quantifying the likelihood of correction of the human error, quantifying the likelihood of the effect of the error, and quantifying the potential severity of the effect of the error.

7. (Previously Presented) The method of Claim 1, wherein the input representing the potential severity of the human error includes a worst-case effect of the human error such that the risk of potential harm includes a risk of a worst-case effect of human error.

8. (Previously Presented) The method of Claim 7, further comprising receiving, at the data processing device, an input representing mechanisms that allow at least one of detection, correction, and prevention of the human error prior to the worst-case effect occurring.

9. (Previously Presented) The method of Claim 1, further comprising generating, with the data processing device, at least one performance-shaping factor for the human error that changes the likelihood that the human error will occur, the performance-shaping factor being related to the human activity involved in the task.

10. (Previously Presented) The method of Claim 9, further comprising displaying the at least one performance-shaping factor in a performance-shaping factor list from which a user can select at least one performance-shaping factor that changes the likelihood that the potential human error will occur.

11. (Previously Presented) The method of Claim 1, further comprising generating, with the data processing device, at least one barrier directed to preventing the occurrence of the human error.

12. (Previously Presented) The method of Claim 11, further comprising recalculating, with the data processing device, the risk of potential harm to include an effect of the barrier in preventing the occurrence of the human error.

13. (Previously Presented) The method of Claim 1, further comprising generating, with the data processing device, at least one control directed to mitigating the effect of the human error.

14. (Previously Presented) The method of Claim 13, further comprising recalculating, with the data processing device, the risk of potential harm to include an effect of the control in mitigating the effect of the human error.

15. (Previously Presented) The method of Claim 13, further comprising recalculating, with the data processing device, the risk of potential harm to include human error probability data.

16. (Previously Presented) The method of Claim 1, further comprising receiving, at the data processing device, an input representing a recommendation that one of prevents the human error, allows mitigation the effect of the human error, allows detection of the human error, and allows correction of the human error prior to the occurrence of the human error.

17. (Canceled)

18. (Previously Presented) The method of Claim 1, the report includes a table collecting results of the human factors process failure modes and effects analysis and risk assessment.

19. (Withdrawn) A method for performing human factors process failure modes and effects analysis for a process, the method comprising:

identifying at least one task involved in the process, the task including at least one human activity and at least one human-system interface;

describing the human activity using at least one verb;

automatically identifying a human error potentially resulting from the human activity, the human error potentially resulting from the human activity being derived from a potential human error database associating potential human errors related the verb used in describing the task;

identifying a likelihood of occurrence of the human error;

identifying a likelihood of correction of the human error;

identifying a potential severity of an effect of the human error;

automatically calculating a risk of potential harm from the likelihood of occurrence of the human error, the likelihood of correction of the human error, and the potential severity of the effect resulting from the human error;

comparing the risk of potential harm with a risk threshold to identify appropriateness of correctives measures to one of reduce or eliminate the risk of potential harm; and

generating at least one of a report and a table collecting results of the human factors process failure modes and effects analysis.

20. (Withdrawn) The method of Claim 19, wherein a plurality of human errors associated with the verb used in describing the human activity is presented in an error list.

21. (Withdrawn) The method of Claim 19, further comprising performing a screening of potential human errors by automatically calculating a risk priority number, below which the potential human error will not be further analyzed.

22. (Withdrawn) The method of Claim 19, wherein calculating the risk of potential harm further comprises quantifying the likelihood of occurrence of the error, quantifying the likelihood of correction of the human error, quantifying the likelihood of occurrence of the effect of the human error, and quantifying the potential severity of the effect of the error.

23. (Withdrawn) The method of Claim 19, wherein the likelihood of occurrence of the human error human error includes a likelihood of occurrence of a worst-case effect of the human error such that the risk of potential harm includes a risk of the worst-case effect of human error.

24. (Withdrawn) The method of Claim 23, further comprising identifying mechanisms that allow at least one of detection, correction, and prevention of the human error prior directed to prevent the worst-case effect from occurring.

25. (Withdrawn) The method of Claim 19, further comprising automatically identifying a performance-shaping factor for the human error that changes the likelihood that the human error will occur, the performance-shaping factor being related to the human activity involved in the task.

26. (Withdrawn) The method of Claim 25, wherein a plurality of performance-shaping factors is presented in a performance-shaping factor list from which a user can select at least one performance-shaping factor that changes the likelihood that the potential human error will occur.

27. (Withdrawn) The method of Claim 19, further comprising identifying at least one barrier directed to preventing the occurrence of the human error.

28. (Withdrawn) The method of Claim 19, further comprising recalculating the risk of potential harm to include an effect of the barrier in preventing the occurrence of the human error.

29. (Withdrawn) The method of Claim 19, further comprising identifying at least one control directed to mitigating the effect of the human error.

30. (Withdrawn) The method of Claim 29, further comprising recalculating the risk of potential harm to include an effect of the control in mitigating the potential harm produced by the human error.

31. (Withdrawn) The method of Claim 29, further comprising recalculating the risk of potential harm to include human error probability data.

32. (Withdrawn) The method of Claim 19, further comprising identifying a recommendation that one of prevents the human error, mitigates the effect of the human error, allows detection of the human error, and allows correction of the human error prior to the occurrence of the human error.

33. (Withdrawn) The method of Claim 32, further comprising determining which of a plurality of potential human errors should have a recommendation to change the risk and which of the plurality of potential human errors requires no further action.

34. (Withdrawn) A computer-readable medium having stored thereon instructions for performing human factors process failure modes and effects analysis for a process, the computer-readable medium comprising:

a first computer program code portion adapted to identify at least one task involved in the process, the task including at least one human activity;

a second computer program code portion adapted to describe the human activity using at least one verb;

a third computer program code portion adapted to automatically identify a human error potentially resulting from the human activity, the human error potentially resulting from the human activity being related to the verb used in describing the task;

a fourth computer program code portion adapted to identify a likelihood of occurrence of the human error;

a fifth computer program code portion adapted to identify a likelihood of correction of the human error;

a sixth computer program code portion adapted to identify a severity of an effect of the human error;

a seventh computer program code portion adapted to automatically calculate a risk of potential harm from the likelihood of occurrence of the human error, the likelihood of correction of the human error, the likelihood of occurrence of the effect of the human error, and the potential severity of the effect resulting from the human error; and

an eighth computer program code portion adapted to compare the risk of potential harm with a risk threshold to identify appropriateness of corrective measures to one of reduce and eliminate the risk of potential harm.

35. (Withdrawn) The computer-readable medium of Claim 34, wherein identifying the task includes identifying a human-system interface.

36. (Withdrawn) The computer-readable medium of Claim 34, wherein the human error identified is derived from a potential human error database associating potential human errors with verbs useable describing the human activity involved in the task.

37. (Withdrawn) The computer-readable medium of Claim 34, wherein a plurality of human errors associated with the verb used in describing the human activity is presented in an error list.

38. (Withdrawn) The computer-readable medium of Claim 34, further comprising a ninth computer program code portion adapted to perform a screening of potential human errors by automatically calculating a risk priority number, below which the potential human error will not be further analyzed.

39. (Withdrawn) The computer-readable medium of Claim 34, wherein calculating the risk of potential harm further comprises quantifying the likelihood of occurrence of the error, quantifying the likelihood of correction of the human error, quantifying the likelihood of occurrence of the effect of the human error, and quantifying the potential severity of the effect of the error.

40. (Withdrawn) The computer-readable medium of Claim 34, wherein identifying the potential severity of the human error includes identifying a worst-case effect of the human error such that the risk of potential harm includes a risk of the worst-case effect of human error.

41. (Withdrawn) The computer-readable medium of Claim 40, further comprising a tenth computer program code portion adapted to identify mechanisms that allow at least one of detection, correction, and prevention of the human error prior to the worst-case effect occurring.

42. (Withdrawn) The computer-readable medium of Claim 34, further comprising an eleventh computer program code portion adapted to automatically identify a performance-shaping factor for the human error that changes the likelihood that the human error will occur, the performance-shaping factor being related to the human activity involved in the task.

43. (Withdrawn) The computer-readable medium of Claim 42, wherein a plurality of performance-shaping factors is presented in a performance-shaping factor list from which a user can select at least one performance-shaping factor that changes the likelihood that the potential human error will occur.

44. (Withdrawn) The computer-readable medium of Claim 34, further comprising a twelfth computer program code portion adapted to identify at least one barrier directed to preventing the occurrence of the human error.

45. (Withdrawn) The computer-readable medium of Claim 34, further comprising a thirteenth computer program code portion adapted to recalculate the risk of potential harm to include an effect of the barrier in preventing the occurrence of the human error.

46. (Withdrawn) The computer-readable medium of Claim 34, further comprising a fourteenth computer program code portion adapted to identify at least one control directed to mitigating the effect of the human error.

47. (Withdrawn) The computer-readable medium of Claim 46, further comprising a fifteenth computer program code portion adapted to recalculate the risk of potential harm to include an effect of the control in mitigating the effect of the human error.

48. (Withdrawn) The computer-readable medium of Claim 46, further comprising a sixteenth computer program code portion adapted to recalculate the risk of potential harm to include human error probability data.

49. (Withdrawn) The computer-readable medium of Claim 34, further comprising a seventeenth computer program code portion adapted to identify a recommendation that one of prevents the human error, mitigates the effect of the human error, allows detection of the human error, and allows correction of the human error prior to the occurrence of the human error.

50. (Withdrawn) The computer-readable medium of Claim 49, further comprising an eighteenth computer program code portion adapted to determine which of a plurality of potential human errors should have a recommendation to change the risk and which of the plurality of potential human errors requires no further action.

51. (Withdrawn) The computer-readable medium of Claim 34, further comprising a nineteenth computer program code portion adapted to generate at least one of a report and a table collecting results of the human factors process failure modes and effects analysis and risk assessment

52. (Withdrawn) A system configured for performing human factors process failure modes and effects analysis for a process, the system comprising:

a first identifier configured to identify at least one task involved in the process, the task including at least one human activity;

an activity describer configured to describe the human activity using at least one verb;

a second identifier configured to automatically identify a human error potentially resulting from the human activity, the human error potentially resulting from the human activity being related to the verb used in describing the task;

a third identifier configured to identify a likelihood of occurrence of the human error;

a fourth identifier configured to identify a likelihood of correction of the human error;

a fifth identifier configured to identify a potential severity of an effect of the human error;

a risk calculator configured to automatically calculate a risk of potential harm from the likelihood of occurrence of the human error, the likelihood of correction of the human error, the likelihood of occurrence of the effect of the human error, and the potential severity of the effect resulting from the human error; and

a risk threshold comparator configured to compare the risk of potential harm with a risk threshold to identify appropriateness of corrective measures to one of reduce or eliminate the risk of potential harm.

53. (Withdrawn) The system of Claim 52, wherein identifying the task includes identifying a human-system interface.

54. (Withdrawn) The system of Claim 52, wherein the human error identified is derived from a potential human error database associating potential human errors with verbs useable describing the human activity involved in the task.

55. (Withdrawn) The system of Claim 52, wherein a plurality of human errors associated with the verb used in describing the human activity is presented in an error list.

56. (Withdrawn) The system of Claim 52, further comprising an error screener configured to perform a screening of potential human errors by automatically calculating a risk priority number, below which the potential human error will not be further analyzed.

57. (Withdrawn) The system of Claim 52, wherein calculating the risk of potential harm further comprises quantifying the likelihood of occurrence of the error, quantifying the likelihood of correction of the human error, quantifying the likelihood of occurrence of the effect of the human error, and quantifying the potential severity of the effect of the error.

58. (Withdrawn) The system of Claim 52, wherein identifying the potential severity of the human error includes identifying a worst-case effect of the human error such that the risk of potential harm includes a risk of a worst-case effect of human error.

59. (Withdrawn) The system of Claim 58, further comprising an error reducer configured to identify mechanisms that allow at least one of detection, correction, and prevention of the human error prior to the worst-case effect occurring.

60. (Withdrawn) The system of Claim 52, further comprising a performance-shaping factor identifier configured to automatically identify a performance-shaping factor for the human error that changes the likelihood that the human error will occur, the performance-shaping factor being related to the human activity involved in the task.

61. (Withdrawn) The system of Claim 60, wherein a plurality of performance-shaping factors is presented in a performance-shaping factor list from which a user can select at least one performance-shaping factor that changes the likelihood that the potential human error will occur.

62. (Withdrawn) The system of Claim 52, further comprising a barrier identifier configured to identify at least one barrier directed to preventing the occurrence of the human error.

63. (Withdrawn) The system of Claim 52, further comprising a first risk recalculator configured to recalculate the risk of potential harm to include an effect of the barrier in preventing the occurrence of the human error.

64. (Withdrawn) The system of Claim 52, further comprising a control identifier to identify at least one control directed to mitigating the effect of the human error.

65. (Withdrawn) The system of Claim 64, further comprising a second risk recalculator configured to recalculate the risk of potential harm to include an effect of the control in mitigating the effect of the human error.

66. (Withdrawn) The system of Claim 64, further comprising a third risk recalculator configured to recalculate the risk of potential harm to include human error probability data.

67. (Withdrawn) The system of Claim 52, further comprising a recommendation identifier configured to identify a recommendation that one of prevents the human error, mitigates the effect of the human error, allows detection of the human error, and allows correction of the human error prior to the occurrence of the human error.

68. (Withdrawn) The system of Claim 67, further comprising a risk selector configured to determine which of a plurality of potential human errors should have a recommendation to change the risk and which of the plurality of potential human errors requires no further action.

69. (Withdrawn) The system of Claim 52, further comprising an output generator configured to generate at least one of a report and a table collecting results of the human factors process failure modes and effects analysis and risk assessment.